

REMARKS

Applicants have amended paragraphs [0030], [0033], [0034], and [0149] to correct minor editorial issues. Paragraphs [0051] and [0066] have been amended to better direct the reader in the figures. Paragraphs [0185] and [0196] have been amended to recite now-issued patent numbers.

Reference numeral 49 has been added to each of Figures 1-8. Support for reference numeral 49 can be found, for example, at page 13, lines 19-29 of the specification. Additionally, Figure 6 has been amended to remove an extraneous block that was present in the formal drawings but not in the originally filed drawings.

Claims 1, 10-11, 31, 36-39, 42, 45, 50-55, 58, 63-67, 70, 76-84, 89, 105 and 113-188 have been amended. Claims 15-17, 34-35, 48-49, 61-62, 73-74, 99 and 101 have been canceled. Each of the independent claims, claims 1, 77, 78, 79, 80, 81, 82, 83, 84, 89, 114, 115, 116, 117, and 118 has been amended to clarify that the systems and methods of the invention do not immerse the object in the liquid compositions; rather, the liquid composition is circulated around and against the object (e.g., sprayed on). Application of the compositions in such a manner provides complete and total coverage of the object with the composition, without having the object sit or immerse in the composition.

Claims 1-14, 18-33, 36-47, 50-60, 63-72, 75-98, 100 and 102-118 are pending. Reconsideration of this application, as amended, is requested.

Claim Rejections - 112

Claim 99 was rejection under 35 U.S.C. 112, second paragraph. Claim 99 has been canceled, rendering this rejection moot. Withdrawal is requested.

Claim Rejections - 102

Claims 1-2, 5, 9-11, 14-25, 29, 31-40, 42-43 and 45-54 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 6,090,213 to Moyers. Applicants request withdrawal of the rejection for the reasons provided below.

Claim 1, the independent claim, has been amended to clarify by the liquid transporter circulates around and against the object composition(s), without having the object immersed in

the composition(s). Claims 2, 5, 9-11, 14-25, 29, 31-40, 42-43 and 45-54 further define the system of claim 1.

As stated by the Examiner, Moyers teaches an automated cleaning system having a variety of stations where the object being treated is immersed in the liquid composition. The object is washed, rinsed, cleaned and dried by the system, each treatment being done in a separate station.

The system of claims 1-2, 5, 9-11, 14-25, 29, 31-40, 42-43 and 45-54, is different from that of Moyers, at least, because the claimed system does not immerse the object in the compositions. Rather, the liquid composition is circulated around and against the object (e.g., sprayed on). Application of the compositions in such a manner provides complete and total coverage of the object with the composition, without having the object sit or immerse in the composition. At least for this reason, Moyers does not anticipate claims 1-2, 5, 9-11, 14-25, 29, 31-40, 42-43 and 45-54, and withdrawal of the rejection is requested.

Claim 77 was rejected under 35 U.S.C. 102(b) as being clearly anticipated by GB 947,700. Applicants request withdrawal of the rejection for the reasons provided below.

Claim 77 has been amended to clarify that the system has a liquid transporter that circulates around and against the object wash composition, antimicrobial composition, and rinse composition without immersing the object.

As stated by the Examiner, this GB references teaches sterilization of objects by placing them within a vessel and immersing the objects within a cleaning composition.

The system of claim 77 is different from that of this GB reference, at least because the claims system does not immerse the object. At least for this reason, this GB reference does not anticipate claim 77 and withdrawal of the rejection is requested.

Claim Rejections - 103

Claims 55-56, 58-68 and 70-75 were rejected under 35 U.S.C. 103(a) as being unpatentable over Moyers. Applicants request withdrawal of the rejection for the reasons provided below.

As stated by the Examiner above under the 102 rejection of claims 1-2, 5, 9-11, 14-25, 29, 31-40, 42-43 and 45-54, Moyers teaches an automated cleaning system having a variety of stations where the object being treated is immersed in the liquid composition. The object is washed, rinsed, cleaned and dried by the system, each treatment being done in a separate station. As stated by the Examiner for this rejection, Moyers teaches a variety of stations.

Claims 55-56, 58-68 and 70-75 all depend, either directly or indirectly from claim 1. At all of the stations, the object is specifically not immersed in the compositions, but rather the liquid compositions are circulated around and against the object (e.g., sprayed on). There is no suggestion in Moyers, which teaches immersing objects in baths of solution, to have multiple stations where the composition is circulated around and against the object (e.g., sprayed on) rather than immersed. At least for this reason, Moyers does not suggest or make obvious claims 55-56, 58-68 and 70-75, and withdrawal of the rejection is requested.

Claims 3-4, 6-8 and 12-13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Moyers as applied to claims 1-2, 5, 9-11, 14-25, 29, 31-40, 42-43, 45-56, 58-68 and 70-75 above, and further in view of Hohmann et al., U.S. patent no. 4,710,233. Applicants request withdrawal of the rejection for the reasons provided below.

Hohmann et al. teaches two means for applying ultrasonic energy to a tank or bath. Hohmann et al., similar to Moyers, uses a bath in which the object to be cleaned is immersed.

The Office Action states that it would have been obvious to include the ultrasonic probe of Hohmann et al. in the system of Moyers. This combination would create an immersion bath having ultrasonics, in which the object is immersed. Such a combination does not suggest the invention of claims 3-4, 6-8 and 12-13, in which the object is specifically not immersed in the compositions, but rather the liquid compositions are circulated around and against the object. At least for this reason, Moyers and Hohmann et al. do not suggest or make obvious claims 3-4, 6-8 and 12-13, and withdrawal of the rejection is requested.

Claims 26-28, 41, 44, 57, 69, 76, 78-84, 87-92, 94-95, 97-101, 103-110 and 112-118 were rejected under 35 U.S.C. 103(a) as being unpatentable over Moyers as applied to claims 1-

2, 5, 9-11, 14-25, 29, 31-40, 42-43, 45-56, 58-68 and 70-75 above, and further in view of GB 947,700. Applicants request withdrawal of the rejection for the reasons provided below.

Claim 1 has been amended to clarify by the liquid transporter circulates around and against the object composition(s), without having the object immersed in the composition(s). Claims 26-28, 41, 44, 57, 69 and 76 further define the system of claim 1.

Each of independent claims 78 through 84 has likewise been amended to clarify that the system has a liquid transporter that circulates around and against the object compositions, without having the object immersed in the compositions. Claims 87-88 further define the system of claim 84.

Claim 89 has been amended to clarify that the method includes contacting the object with the compositions without immersing the object. Claims 90-92, 94-95, 97-101, 103-110 and 112-113 further define the method of claim 89.

Each of independent claims 114 through 118 has likewise been amended to clarify that the method includes contacting the object with the compositions without immersing the object.

Both Moyers and this GB reference have been discussed above; both teach placing objects in a bath for cleaning. The Office Action states that it would have been obvious to include the gaseous sterilant injection means of the GB reference in the system of Moyers. This combination would create an immersion bath having sterilant injection means, in which the object is immersed. Such a combination does not suggest the invention of claims 26-28, 41, 44, 57, 69, 76, 78-84, 87-92, 94-95, 97-101, 103-110 and 112-118, in which the object is specifically not immersed in the compositions, but rather the liquid compositions are circulated around and against the object. At least for this reason, Moyers and this GB reference do not suggest or make obvious the rejected claims, and withdrawal of the rejection is requested.

Claims 30, 85-86, 102 and 111 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Moyers together with GB 947,700 as applied to claims 1-2, 9-11, 14-29, 31-76, 78-84, 87-92, 94-95, 97-101, 103-110 and 112-118 above, and further in view of GB 2,040,150 A. Applicants request withdrawal of the rejection for the reasons provided below.

Claim 1 has been amended to clarify by the liquid transporter circulates around and against the object composition(s), without having the object immersed in the composition(s). Claim 30 further defines the system of claim 1.

Claim 84 been amended to clarify that the system has a liquid transporter that circulates around and against the object the wash, antimicrobial and rinse compositions, without having the object immersed in the compositions. Claims 85-86 further define the system of claim 84.

Claim 89 has been amended to clarify that the method includes contacting the object with the compositions without immersing the object. Claims 102 and 111 further define the method of claim 89.

Both Moyers and the GB '700 reference have been discussed above; both teach placing objects in a bath for cleaning. The GB '150 reference teaches cleaning and sterilizing objects in a tank containing a cleaning liquid, the objects being exposed to ultrasonics and radiation while being immersed. The Office Action states that it would have been obvious to include the radiation means of the GB '150 reference in the combined system of Moyers and GB '700. This combination would create an immersion bath including a radiation source, in which the object is immersed. Such a combination does not suggest the invention of claims 30, 85-86, 102 and 111, in which the object is specifically not immersed in the compositions, but rather the liquid compositions are circulated around and against the object. At least for this reason, Moyers and the two GB references do not suggest or make obvious the rejected claims, and withdrawal of the rejection is requested.

Claims 93 and 96 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Moyer together with GB 947,700 as applied to claims 1-2, 9-11, 14-29, 31-76, 78-84, 87-92, 94-95, 97-101, 103-110 and 112-118 above, and further in view of Hohmann et al. Applicants request withdrawal of the rejection for the reasons provided below.

Claim 89 has been amended to clarify that the method includes contacting the object with the compositions without immersing the object. Claims 93 and 96 further define the method of claim 89.

All of Moyers, the GB '700 reference and Hohmann et al. have been discussed above; all teach placing objects in a bath for cleaning. The Office Action states that it would have been

obvious to include the ultrasonic probe of Hohmann et al. in the combined system of Moyers and GB '700. This combination would create an immersion bath including an ultrasonic probe, in which the object is immersed. Such a combination does not suggest the invention of claims 93 and 96, in which the object is specifically not immersed in the compositions, but rather the liquid compositions are circulated around and against the object. At least for this reason, Moyers, GB '700 and Hohmann et al. do not suggest or make obvious the rejected claims, and withdrawal of the rejection is requested.

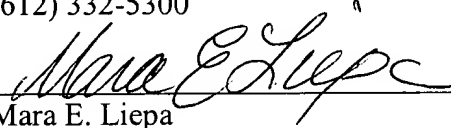
SUMMARY

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Date: October 7, 2004


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Amendments to the Drawings:

The sheets of drawings attached in the Appendix include changes to all figures, Figures 1-8.
These sheets replace the original sheets.

The drawings have been changed as follows:

Each of Figures 1-8 now includes reference numeral 49, for Apparatus (49)

In Figure 6, an extraneous block has been removed.



Reference Numeral Added

Fig. 1

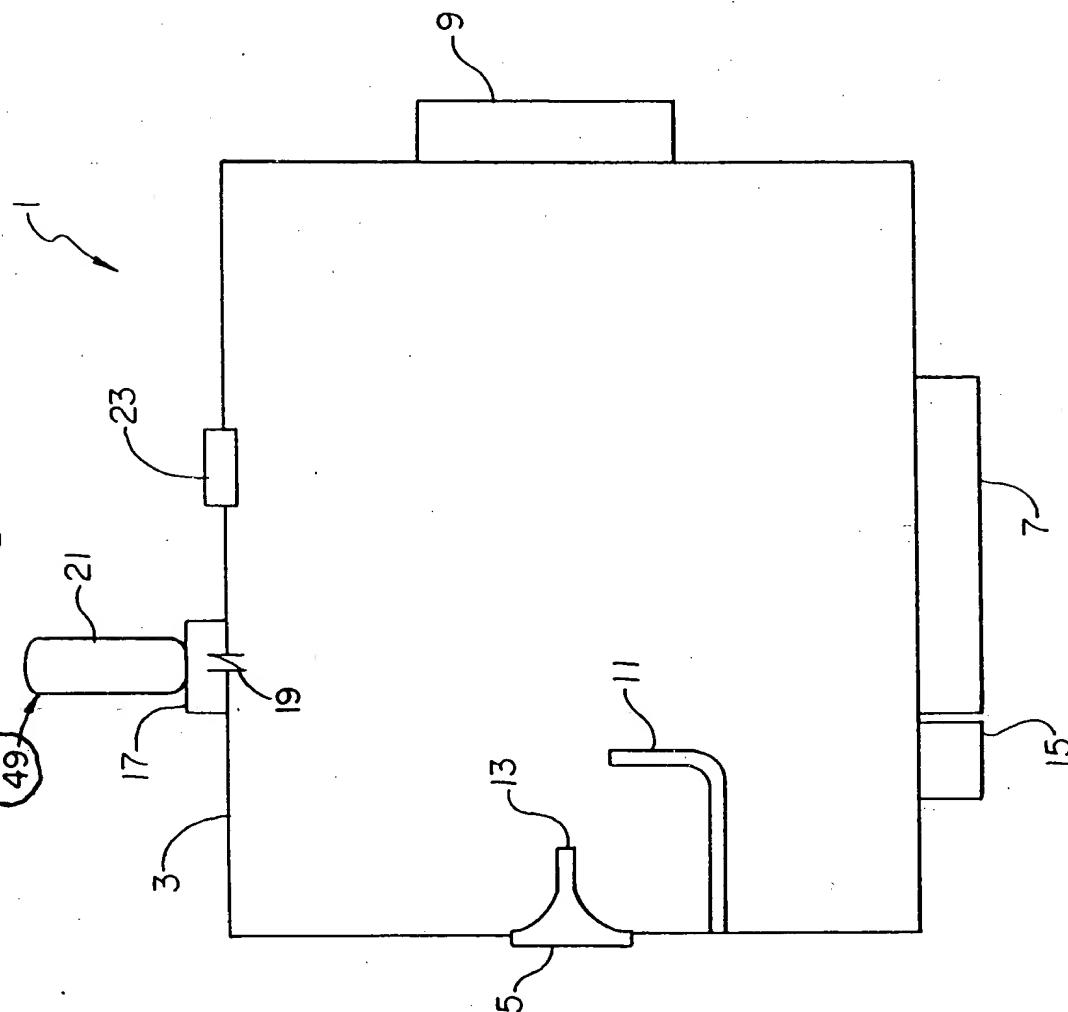
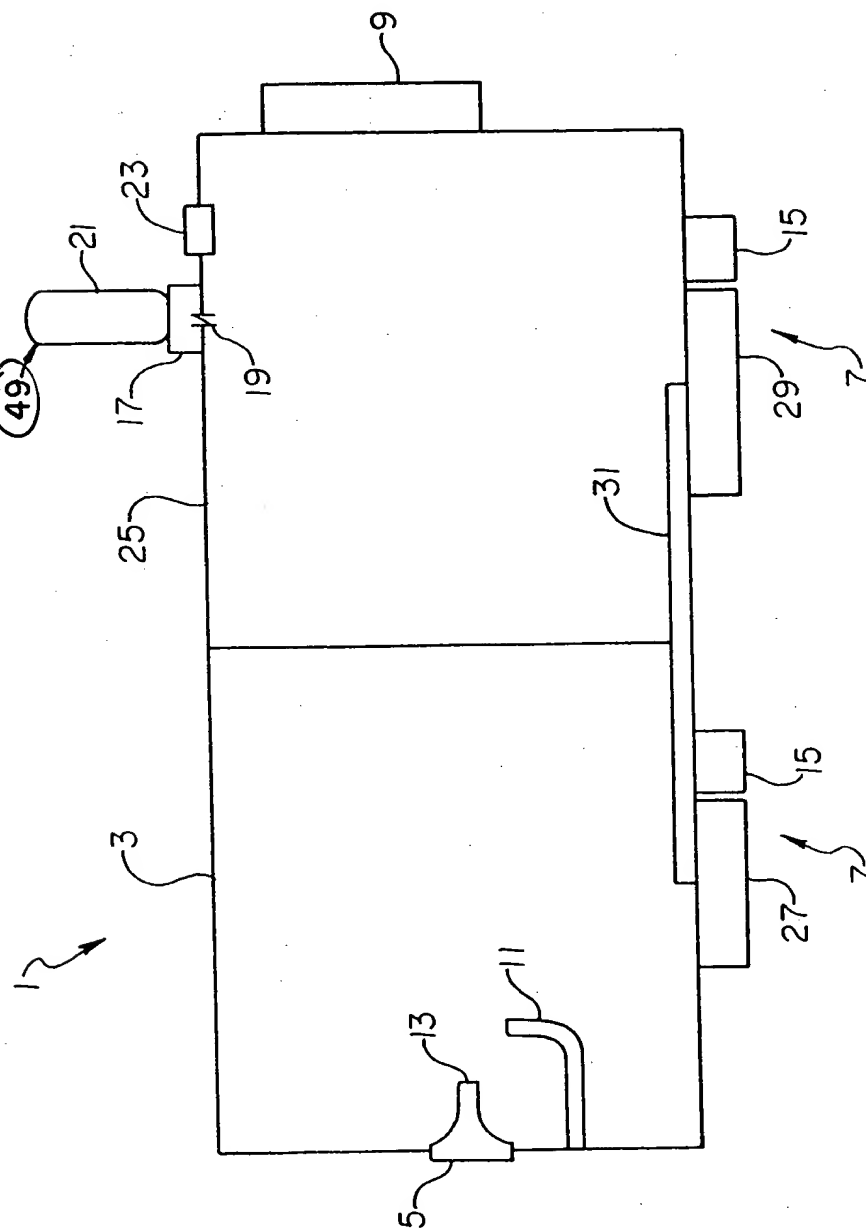
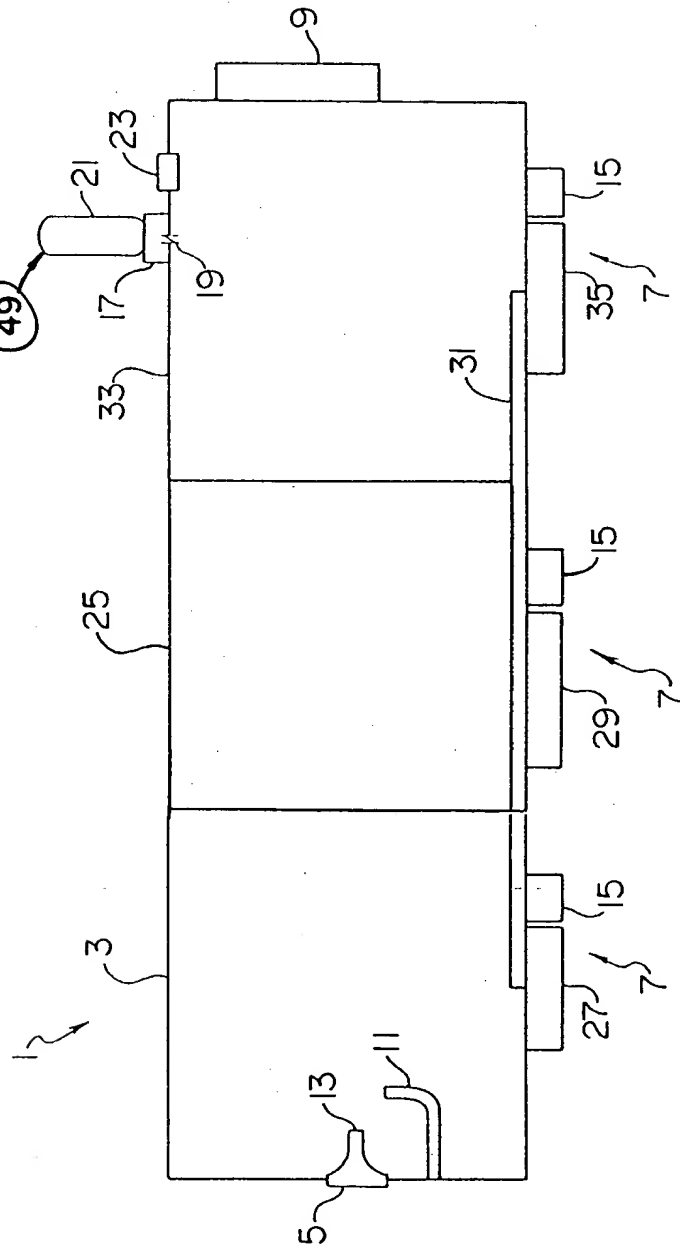


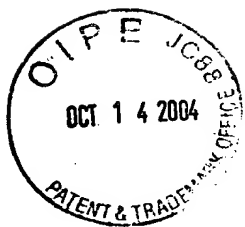


Fig. 2 *Reference Numeral Added*



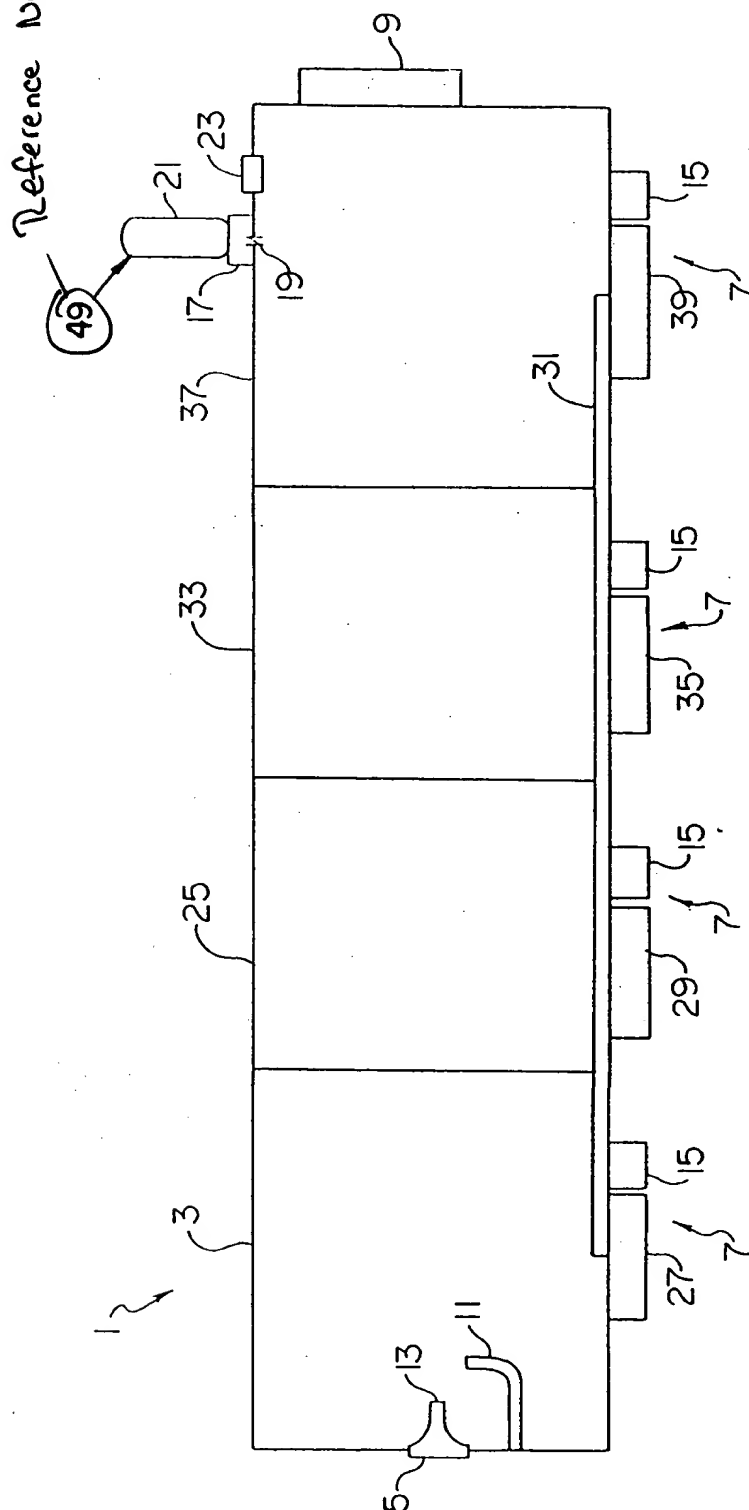
Reference Number Added





Inventor: SWART ET AL.
Docket No.: 163.1385US01
Title: SYSTEM AND METHOD FOR CLEANING, HIGH LEVEL DISINFECTION, OR
STERILIZATION OF MEDICAL OR DENTAL INSTRUMENTS OR DEVICES
Serial No.: 09/844,965
Sheet 4 of 8
ANNOTATED SHEET

Fig. 4

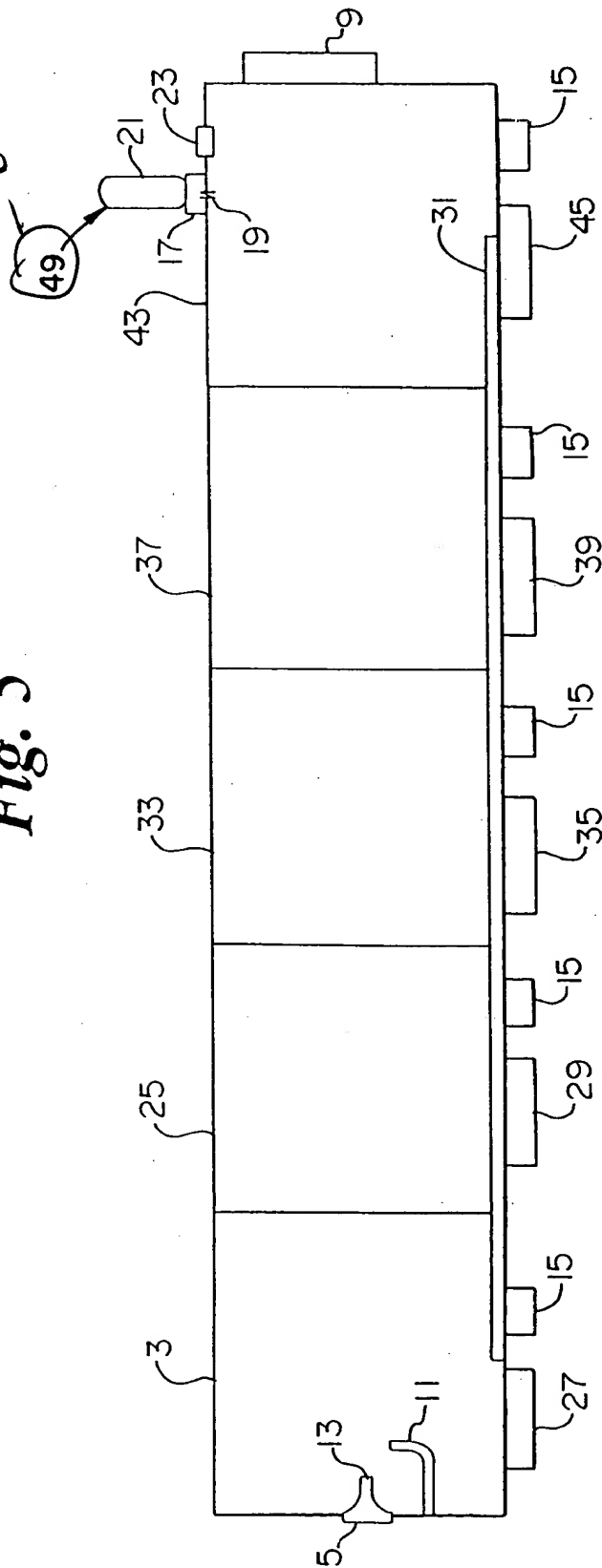


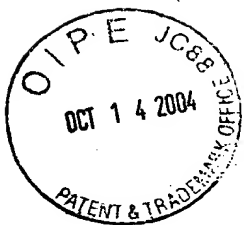


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Sheet 5 of 8
ANNOTATED SHEET

Reference numeral
Add

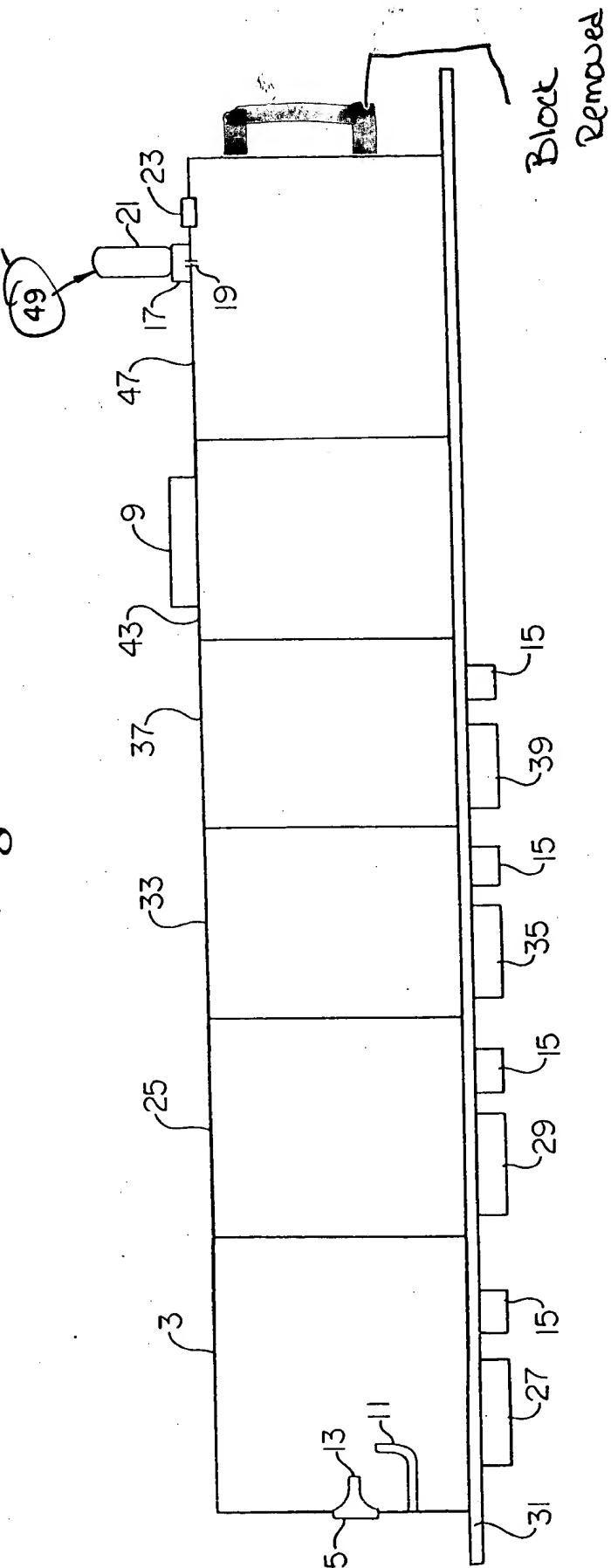
Fig. 5





Added
to reference numeral

Fig. 6





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Serial No.: 09/844,965
Sheet 7 of 8
ANNOTATED SHEET

Fig. 7

Reference Numerical
Add

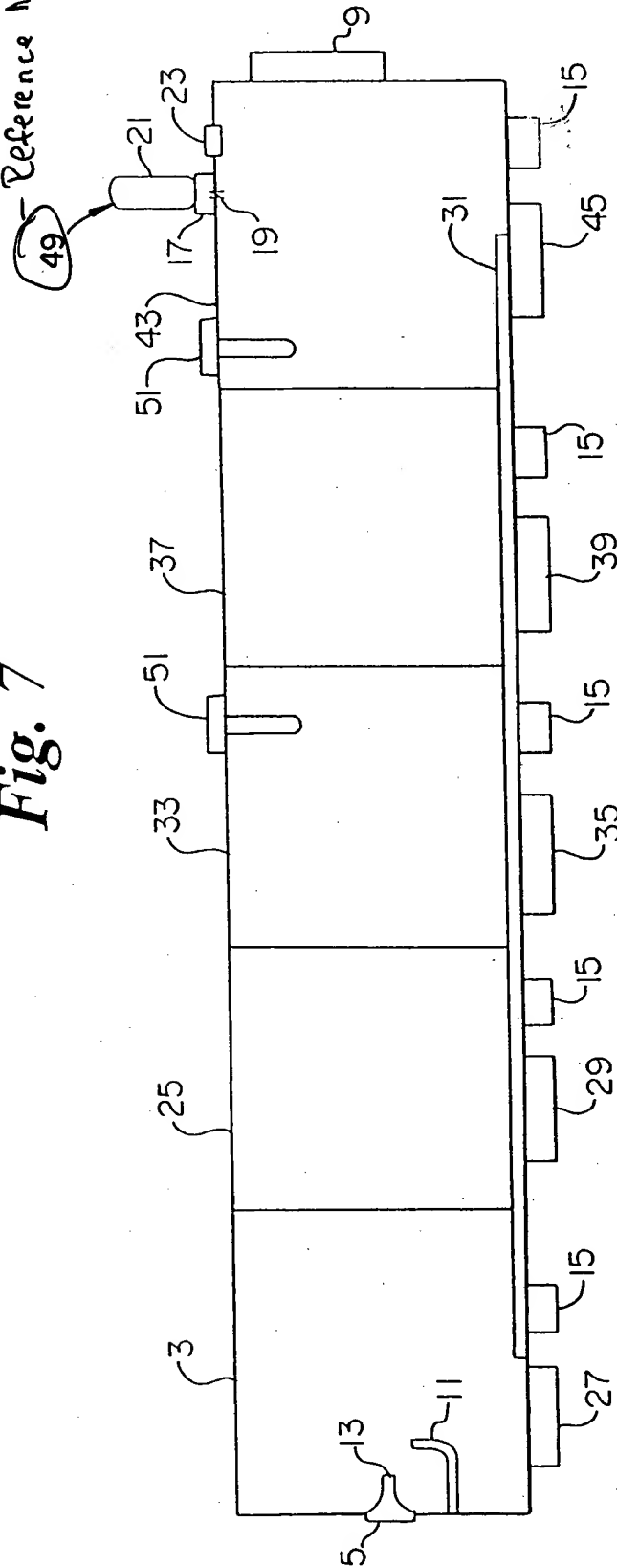




Fig. 8

